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Applicant : Maureen J. Charron and Ellen B. Katz  
Serial No. : 09/516,493  
Filed : March 1, 2000  
For : NOVEL GLUCOSE TRANSPORTER/SENSOR PROTEIN AND  
USES THEREOF  
Examiner : Sumesh Kaushal, Ph.D.  
Group Art Unit : 1633

REPLY AND AMENDMENT UNDER 37 C.F.R. 1.111

Commissioner for Patents  
Washington, D.C. 20231

Box Non-Fee Amendment

Sir:

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Date of Deposit: June 3, 2002

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner for Patents, Washington, D.C. 20231.

Name: Elie H. Gendloff

Signature: 

This Reply and Amendment is in response to the Office Action dated March 1, 2002 in the above-identified case. Since this Reply is due June 1, 2002, which was a Saturday, this Reply is timely filed on June 3, 2002.

Amendment

Please cancel claims 1-16, 19-21 and 25-29 without prejudice or disclaimer and substitute therefor the following claims <sup>44-72</sup>30-58.

44.  
~~30.~~ (New) An isolated nucleic acid sequence, the sequence comprising at least 1362 nucleotides, that hybridizes under high stringency conditions to a nucleotide sequence selected from the group consisting of SEQ ID NO:6, SEQ ID NO:9, SEQ ID NO:11, the complement of SEQ ID NO:6, the complement of SEQ ID NO:9, and the complement of SEQ ID NO:11.

45.  
~~31.~~ (New) The isolated nucleic acid sequence of claim 30, wherein the sequence hybridizes under high stringency conditions to SEQ ID NO:6 or the complement of SEQ ID NO:6.

46.  
~~32.~~ (New) The isolated nucleic acid sequence of claim 30, wherein the sequence hybridizes under high stringency conditions to SEQ ID NO:9 or the complement of SEQ ID NO:9.

47.  
~~33.~~ (New) The isolated nucleic acid sequence of claim 30, wherein the sequence hybridizes under high stringency conditions to SEQ ID NO:11 or the complement of SEQ ID NO:11.

48.  
~~34.~~ (New) The isolated nucleic acid sequence of claim 30, wherein the nucleic acid sequence or its complement encodes an amino acid sequence comprising 12 transmembrane domains, as determined by hydropathy plot analysis.

49.  
~~35.~~ (New) The isolated nucleic acid sequence of claim 30, wherein the sequence is identical or complementary to at least a portion of SEQ ID NO:6.

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*rule 1.26*  
<sup>50</sup>  
~~36.~~ (New) The isolated nucleic acid sequence of claim 30, wherein the sequence is identical or complementary to at least a portion of SEQ ID NO:9.

<sup>51</sup>  
~~37.~~ (New) The isolated nucleic acid sequence of claim 30, wherein the sequence is identical or complementary to at least a portion of SEQ ID NO:11.

*C1*  
<sup>52</sup>  
~~38.~~ (New) The isolated nucleic acid sequence of claim 30, wherein the sequence is identical or complementary to SEQ ID NO:6.

<sup>53</sup>  
~~39.~~ (New) The isolated nucleic acid sequence of claim 35, wherein the sequence comprises nucleotides 11 to 1372 of SEQ ID NO:6.

<sup>54</sup>  
~~40.~~ (New) The isolated nucleic acid sequence of claim 38, comprising SEQ ID NO:6.

<sup>55</sup>  
~~41.~~ (New) The isolated nucleic acid sequence of claim 30, wherein the nucleic acid sequence encodes SEQ ID NO:7.

<sup>56</sup>  
~~42.~~ (New) The isolated nucleic acid sequence of claim 30, wherein the nucleic acid sequence encodes SEQ ID NO:10.

<sup>57</sup>  
~~43.~~ (New) The isolated nucleic acid sequence of claim 30, wherein the nucleic acid sequence encodes SEQ ID NO:12.

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*rule 1.26*  
<sup>58</sup>  
~~44~~ (New) The isolated nucleic acid sequence of claim 41, wherein the amino acid sequence is SEQ ID NO:7.

<sup>59</sup>  
~~45~~ (New) The isolated nucleic acid sequence of claim 30, wherein expression of the sequence is increased in a mammal in response to hyperglycemia or insulinopenia.

*C*  
<sup>60</sup>  
~~46~~ (New) The isolated nucleic acid sequence of claim 30, wherein the nucleic acid sequence is RNA.

<sup>61</sup>  
~~47~~ (New) The isolated nucleic acid sequence of claim 46, wherein the RNA is mRNA.

<sup>62</sup>  
~~48~~ (New) The isolated nucleic acid sequence of claim 30, wherein the nucleic acid sequence is DNA.

<sup>63</sup>  
~~49~~ (New) The isolated nucleic acid sequence of claim 48, wherein the nucleic acid sequence is cDNA.

<sup>64</sup>  
~~50~~ (New) A probe comprising the nucleic acid sequence of claim 30, wherein the nucleic acid sequence is labeled.

<sup>65</sup>  
~~51~~ (New) The probe of claim 50, wherein the nucleic acid sequence is labeled with a radioactive label.

<sup>66</sup>  
~~52~~ (New) A vector comprising the nucleic acid sequence of claim 48.